



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,270	02/06/2004	Harry Wineberg	5404	4453

26936 7590 03/16/2006

SHOEMAKER AND MATTARE, LTD
10 POST OFFICE ROAD - SUITE 110
SILVER SPRING, MD 20910

EXAMINER

GUIDOTTI, LAURA COLE

ART UNIT	PAPER NUMBER
----------	--------------

1744

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,270

Applicant(s)

WINEBERG, HARRY

Examiner

Laura C. Guidotti

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. Applicant is advised that should claims 6 and 8 be found allowable, claims 19-20 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Crawford, USPN 2,040,245 and Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Crawford, USPN 2,040,245 as further evidenced by Kott, USPN 3,196,299.

Crawford discloses the claimed invention including a handle (5) and a head connected to the end of the handle (6), the head having a plurality of tufts of bristles extending from a front thereof (10 and 12), from positions on either side of a longitudinal centerline of the front, the tufts (12 only) being angled inwardly toward the centerline (best shown in Figures 1 and 4) and ends of the tufts being tapered inwardly (at 13; see Figure 4).

Kott teaches a powered device that accepts conventional toothbrushes so that there is a greater variety of toothbrushes available to a user so that the user has the most desirable bristle hardness, brush contour, etc. and an so that more than one user can use the powered portion of the device (Column 1 Lines 22-36). As evidenced by Kott, the entire device of Crawford is considered to be a replaceable toothbrush head having first and second ends (the first end is the end of the handle, 5; the second end is the end of the brush head) and the coupling at the first end is the grasping portion of the handle (5).

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Fitz-Gibbon, USPN 1,346,536 and Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Fitz-Gibbon, USPN 1,346,536 as further evidenced by Kott, USPN 3,196,299.

Fitz-Gibbon discloses the claimed invention including a handle (5) and a head connected to the end of the handle (6), the head having a plurality of tufts of bristles extending from a front thereof (12, 13, 15), from positions on either side of a longitudinal centerline of the front, the tufts (12, 13) being angled inwardly toward a centerline (see Figures 2, 3, and 5) and ends of the tufts being tapered inwardly (as particularly shown in Figure 5).

Kott teaches a powered device that accepts conventional toothbrushes so that there is a greater variety of toothbrushes available to a user so that the user has the most desirable bristle hardness, brush contour, etc. and an so that more than one user can use the powered portion of the device (Column 1 Lines 22-36). As evidenced by Kott, the entire device of Fitz-Gibbon is considered to be a replaceable toothbrush head

Art Unit: 1744

having first and second ends (the first end is the end of the handle, 5; the second end is the end of the brush head) and the coupling at the first end is the grasping portion of the handle (5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1, 3-4, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Axelsson, USPN D243,568 in view of Jobst, USPN 2,224,788 and Claims 9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Axelsson, USPN D243,568 in view of Jobst, USPN 2,224,788 as further evidenced by Kott, USPN 3,196,299.

Axelsson discloses the claimed invention including a toothbrush comprising a handle (rightmost portion as shown in Figure 1) and a head connected to the end of the handle (leftmost portion as shown in Figure 1), the head having a plurality of tufts of

Art Unit: 1744

bristles extending from a front thereof, from positions on either side of a longitudinal centerline of the front (see Figures), the tufts being angled inwardly toward the centerline (best shown in Figures 3-4 and 7). The ends of the tufts form a single brush edge (Figures 3-4 and 7). Axelsson does not disclose that the ends of the tufts are tapered inwardly to the edge.

Jobst teaches two adjacent bristle tufts (C) that have their ends tapered inwardly to form an edge (Figure 4). The tapering on each tuft so that only central bristles come into contact with the surface being cleaned and these central bristles are supported and reinforced by the shorter outer bristles, and when in use are strengthened (Column 2 Lines 11-16, 30-33).

It would have been obvious for one of ordinary skill in the art to modify the ends of the bristle tufts of Axelsson so that they are tapered inwardly, as Jobst teaches, so that the central bristles that form the edge and are under greater longitudinal stress than other bristles, are strengthened by the shorter outer bristles.

Kott teaches a powered device that accepts conventional toothbrushes so that there is a greater variety of toothbrushes available to a user so that the user has the most desirable bristle hardness, brush contour, etc. and an so that more than one user can use the powered portion of the device (Column 1 Lines 22-36). As evidenced by Kott, the entire device of Axelsson is considered to be a replaceable toothbrush head having first and second ends (the first end is the end of the handle; the second end is the end of the brush head) and the coupling at the first end is the grasping portion of the handle.

Art Unit: 1744

5. Claims 1-4 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571 in view of Jobst, USPN 2,224,788 and Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571 in view of Jobst, USPN 2,224,788 as further evidenced by Kott, USPN 3,196,299.

Ayers discloses the claimed invention including a handle for grasping during use (12) and a head connected to an end of the handle (14), the head having a plurality of tufts of bristles extending from a front thereof, from portions on either side of a centerline of the front (24; see Figures 1, 3, 5; Column 4 Lines 14-17), the tufts being angled inwardly toward the centerline (see particularly figure 5; Column 4 Lines 14-17). The tufts extend at an angle toward said centerline from alternating sides of the longitudinal centerline such that the end of each tuft is adjacent an end of at least one tuft from an opposite side of said centerline (see Figures 1 and 3; Column 4 Lines 6-11). There is one single brush edge (Figures 5 and 10; Column 4 Lines 18-21). Ayers does not disclose that the ends of tufts are tapered inwardly.

Jobst teaches two adjacent bristle tufts (C) that have their ends tapered inwardly to form an edge (Figure 4). The tapering on each tuft so that only central bristles come into contact with the surface being cleaned and these central bristles are supported and reinforced by the shorter outer bristles, and when in use are strengthened (Column 2 Lines 11-16, 30-33).

It would have been obvious for one of ordinary skill in the art to modify the ends of the bristle tufts of Ayers so that they are tapered inwardly, as Jobst teaches, so that the central bristles that form the edge and are under greater longitudinal stress than

other bristles, are strengthened by the shorter outer bristles.

Kott teaches a powered device that accepts conventional toothbrushes so that there is a greater variety of toothbrushes available to a user so that the user has the most desirable bristle hardness, brush contour, etc. and an so that more than one user can use the powered portion of the device (Column 1 Lines 22-36). As evidenced by Kott, the entire device of Ayers is considered to be a replaceable toothbrush head having first and second ends (the first end is the end of the handle 12; the second end is the end of the brush head) and the coupling at the first end is the grasping portion of the handle.

6. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571 and Jobst, USPN 2,224,788 in further view of Gambino, USPN 3,100,309 and Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571 and Jobst, USPN 2,224,788 in further view of Gambino, USPN 3,100,309 as further evidenced by Kott, USPN 3,196,299.

Ayers and Jobst disclose all elements above, however do not disclose that the brush edge is spaced from the front of the head and is laterally centered along the head such that the brush edge lies in a plane that extends through the centerline and is perpendicular to the front.

Gambino discloses a toothbrush having both a head and handle and tufts of bristles that are angled inwardly towards a centerline of the brush head (see Figure 1). Gambino includes that a brush edge (located at the ends of the tufts 14) is spaced from the front of the head (see Figures) and is laterally centered along the head such that the

Art Unit: 1744

brush edge lies in a plane that extends through the centerline and is perpendicular to the front (see Figures 1 and 4) so that the bristles and the toothbrush have an optimum position for brushing teeth in an optimum stroking manner (Column 1 Lines 54-68).

It would have been obvious for one of ordinary skill in the art to modify the orientation of the brush head of Ayers and Jobst so that it is laterally centered along the head such that the brush edge lies in a plane that extends through the centerline and is perpendicular to the front, as Gambino teaches, so that the toothbrush design is optimized so that the brush strokes in use are in a more optimal position.

7. Claims 6 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571 and Jobst, USPN 2,224,788 in further view of Lanvers, USPN 6,311,360 and Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571 and Jobst, USPN 2,224,788 in further view of Lanvers, USPN 6,311,360 as further evidenced by Kott, USPN 3,196,299.

Ayers and Jobst disclose all elements above, however do not disclose that the tufts include bristles surrounded by a sheath with the bristles extending therefrom.

Lanvers teaches a toothbrush having tufts of bristles (20) that also include sheaths (30) surrounding the bristles and allowing the bristles to extend therefrom (see Figures) so that the bristles are better supported, allows bristles a high flexibility, and allows a prolonged use of the brush (Abstract; Column 1 Lines 41-49).

It would have been obvious for one of ordinary skill in the art to modify the bristle tufts of Ayers and Jobst to further include a sheath surrounding the bristles and have

Art Unit: 1744

the bristles extending through the sheath, as Lanvers teaches, so that there is increased bristle flexibility and support.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571, Jobst, USPN 2,224,788, and Lanvers, USPN 6,311,360 in further view of Berendse et al., USPN 5,914,386 and Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571, Jobst, USPN 2,224,788, and Lanvers, USPN 6,311,360 in view of Berendse et al., USPN 5,914,386 as further evidenced by Kott, USPN 3,196,299.

Ayers, Jobst, and Lanvers disclose all elements above, however do not disclose that the sheath is specifically a copolyester elastomer. Lanvers states that the sheath (30) is a non-rigid plastic component that is capable of being injection molded (Column 5 Lines 43-47).

Berendse et al. teach that a copolyester elastomer has elastomeric properties, good mechanical properties, a very good thermal stability, and are capable of being injection molded (Column 1 Lines 5-12).

It would have been obvious for one of ordinary skill in the art to substitute the sheath material of Ayers, Jobst, and Lanvers to be a copolyester polymer, as Berendse et al. teach, so that they have elastomeric properties having a good thermal stability and can be injection molded.

9. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayers, USPN 4,051,571 and Jobst, USPN 2,224,788 in view of Halm, USPN 5,052,071.

Art Unit: 1744

Ayers and Jobst disclose all elements above, however do not include a flexible joint located between said head and handle or embedded in the handle.

Halm discloses a toothbrush having a handle (16) and head (10) having a flexible joint (18) located and embedded between the head and handle (see Figures). The flexible joint allows the toothbrush head to reach all portions of the mouth when brushing the teeth (Column 1 Lines 10-18, 44-58).

It would have been obvious for one of ordinary skill in the art to modify the toothbrush of Ayers and Jobst to further include and embed a flexible joint located between the head and handle, as Halm teaches, so that the toothbrush head will resiliently under pressure be able to reach many portions of the oral cavity for cleaning.

10. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Axelsson, USPN D243,568 and Jobst, USPN 2,224,788 in view of Halm, USPN 5,052,071.

Axelsson and Jobst disclose all elements above, however do not include a flexible joint located between said head and handle or embedded in the handle.

Halm discloses a toothbrush having a handle (16) and head (10) having a flexible joint (18) located and embedded between the head and handle (see Figures). The flexible joint allows the toothbrush head to reach all portions of the mouth when brushing the teeth (Column 1 Lines 10-18, 44-58).

It would have been obvious for one of ordinary skill in the art to modify the toothbrush of Axelsson and Jobst to further include and embed a flexible joint located

Art Unit: 1744

between the head and handle, as Halm teaches, so that the toothbrush head will resiliently under pressure be able to reach many portions of the oral cavity for cleaning.


Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LCG
LCG


GLADYS J.P. CORCORAN
PRIMARY EXAMINER